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Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

Claim 1 (canceled).

~~2.~~ (currently amended) The method of claim ~~1~~ 15, wherein the amino acid sequence (S/T)-X-(V/I/L) is fused to the C-terminal of the second protein.

Claim 3 (canceled).

~~4.~~ (currently amended) The method of claim ~~1~~ 15, wherein the first protein deposited in step (a) is in a soluble buffer.

~~5.~~ (currently amended) The method of claim ~~1~~ 15, wherein the first protein deposited in step (a) is immobilized in a gel.

~~6.~~ (currently amended) The method of claim ~~1~~ 15, wherein the substrate includes a plurality of microwells contained therein, and the first protein is deposited in step (a) into the microwells.

~~7.~~ (currently amended) The method of claim ~~1~~ 15, wherein the substrate includes a glass plate, and the first protein array is printed onto the glass plate in step (a).

~~8.~~ (currently amended) The method of claim ~~1~~ 15, wherein the substrate includes a glass plate and a plurality of gel pads on the glass plate, and the first protein is deposited in step (a) onto the gel pads.

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~~9.~~ (currently amended) The method of claim ~~1~~ ¹⁵, wherein the first protein is deposited on the substrate by a robot.

Claims 10-13 (canceled).

~~14.~~ (currently amended) A method of preparing a protein array, comprising the steps of:

(a) depositing on a substrate an array of first proteins, each first protein comprising a PDZ domain; and

(b) applying a second protein, which comprises an amino acid sequence (S/T)-X-(V/I/L)-COOH, to the array of first proteins, the amino acid sequence (S/T)-X-(V/I/L)-COOH of the second protein, for each of the first proteins, binding to the PDZ domain of the first protein,

wherein each hyphen represents a peptide bond, each parenthesis encloses amino acids which are alternatives to one other, each slash within such parentheses separates the alternative amino acids, and the X represents any amino acid which is selected from the group ~~comprising the twenty naturally occurring amino acids~~ consisting of alanine, cysteine, aspartic acid, glutamic acid, phenylalanine, glycine, histidine, isoleucine, lysine, leucine, methionine, asparagine, proline, glutamine, arginine, serine, threonine, valine, tryptophan and tyrosine.

~~15.~~ (currently amended) A method of preparing a protein array, comprising the steps of:

(a) depositing on a substrate an array of a first protein, the first protein comprising a PDZ domain; and

(b) applying a plurality of second proteins, each of which comprises ~~a corresponding~~ an amino acid sequence (S/T)-X-(V/I/L)-COOH, to ~~corresponding~~ the elements of the first protein array, for each of the second proteins, the amino acid sequence (S/T)-X-

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(V/I/L)-COOH of the second protein binding to the PDZ domain of the first protein in the ~~corresponding~~ array element,

wherein each hyphen represents a peptide bond, each parenthesis encloses amino acids which are alternatives to one other, each slash within such parentheses separates the alternative amino acids, and the X represents any amino acid which is selected from the group ~~comprising the twenty naturally occurring amino acids~~ consisting of alanine, cysteine, aspartic acid, glutamic acid, phenylalanine, glycine, histidine, isoleucine, lysine, leucine, methionine, asparagine, proline, glutamine, arginine, serine, threonine, valine, tryptophan and tyrosine.

Claims 16-20 (canceled).

21. (new) The method of claim 14, wherein the amino acid sequence (S/T)-X-(V/I/L) is fused to the C-terminal of the second protein.

22. (new) The method of claim 14, wherein at least one of the first proteins deposited in step (a) is in a soluble buffer.

23. (new) The method of claim 14, wherein at least one of the first proteins deposited in step (a) is immobilized in a gel.

24. (new) The method of claim 14, wherein the substrate includes a plurality of microwells contained therein, and the first proteins are deposited in step (a) into the microwells.

25. (new) The method of claim 14, wherein the substrate includes a glass plate, and the first proteins are printed onto the glass plate in step (a).

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26. (new) The method of claim 14, wherein the substrate includes a glass plate and a plurality of gel pads on the glass plate, and the first proteins are deposited in step (a) onto the gel pads.

27. (new) The method of claim 14, wherein the first proteins are deposited on the substrate by a robot.
